



# MSS

## Non-Contact Magnetostrictive Position Sensor

- Measuring range 100 - 5000 mm
- 16 bit resolution
- Output 0 - 10V, 0 - 20 mA, 4 - 20 mA
- 24 VDC power supply



### Technical Specifications

Measurement stroke	100 to 5000 mm
Resolution	16 bit DAC output
Repeatability	$\pm 0,005\%$ (full scale)
Output	0 - 10V, 0 - 20 mA, 4 - 20 mA
Power supply	24 VDC $\pm 10\%$
Displacement speed	< 10 m/s
Sampling rate	up to 2 kHz (depending on stroke length)
Max. cursor gap	3 mm
Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Max. output value	10.5 V
Linearity	$\pm 0,02\%$ full scale (min. 100 $\mu\text{m}$ )
Update time	0,5 ms up to 1000 mm / 0,8 ms up to 5000 mm
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to 40 VDC
IP degree	IP 65

# MSW

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Repeatability	±0,005% (full scale)
Output	0 - 10V, 0 - 20 mA, 4 - 20 mA
Power supply	24 VDC ±10%
Displacement speed	< 10 m/s
Sampling rate	up to 2 kHz (depending on stroke length)
Max. cursor gap	3 mm
Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Max. output value	10.5 V
Linearity	±0,02% full scale (min. 100 µm)
Update time	0,5 ms up to 1000 mm / 0,8 ms up to 5000 mm
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to 40 VDC
IP degree	IP 65

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Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Max. output value	10.5 V
Linearity	±0,02% full scale (min. 100 µm)
Update time	0,5 ms up to 1000 mm / 0,8 ms up to 5000 mm
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to 28 VDC
Pressure rating	< 500 bar
Mounting	M18 x 1.5
Housing material	Profile: Anodized aluminium, Tube: Stainless steel, Caps: Stainless steel
IP degree	IP 65

# DMSS

## Digital Non-Contact Magnetostrictive ve Position Sensor

- Measuring range 100 - 5000 mm •
- 15 bit resolution •
- CANopen, ProfiBUS, EtherCAT, Modbus, •
- SSI, BISS INTERFACE or CANbus output options



### CANopen/CANbus Technical Specifications

Interface	CAN
Protocol	CANopen, CANbus
Communication profile	CiA301, CiA406 V3.2
Node number	1 up to 127 (default Node ID: 88)
Green LED	Power on, Can communication active
Red LED	Error, Stop mode
Protection	IP65

### ModBUS RTU Technical Specifications

Interface	RS485
Protocol	Modbus RTU
Communication profile	Modbus RTU V1.1
Node number	1 - 247
Baud rate	9600 - 115200 bit/sec.

### BISS Technical Specifications

Communication	RS422
Protocol	BISS binary
Status LED	Optional
Green LED	Power on, Bus communicaton
Red LED	Sensor error

### ProfiBUS Technical Specifications

Interface	PROFIBUS-DP
Protocol	PROFIBUS-DP V0/V1/V2
Line Driver	Galvanic isolated
Node addressing	By switches or software
Green LED	Power on, PROFIBUS communication active
Red LED	Error, Stop mode
Protection	IP65

### EtherCAT Technical Specifications

Interface	EtherCAT Ethernet control automotian technology
Protocol	EtherCAT 100 Base-Tx, Fast Ethernet
Baud rate	Max. 100 Mbit/s
Green LED	Power on, EtherCAT communication active
Red LED	Error, Stop mode
Protection	IP65

### SSI Technical Specifications

Communication	RS422
Protocol	SSI binary, SSI gray
Status LED	Optional
Green LED	Power on, Bus communicaton
Red LED	Sensor error

# DMSW

## Digital Non-Contact Magnetostrictive ve Position Sensor

- Measuring range 100 - 5000 mm
- 15 bit resolution
- CANopen, ProfiBUS, EtherCAT, Modbus, SSI, BISS INTERFACE or CANbus output options



### CANopen/CANbus Technical Specifications

Interface	CAN
Protocol	CANopen, CANbus
Communication profile	CiA301, CiA406 V3.2
Node number	1 up to 127 (default Node ID: 88)
Green LED	Power on, Can communication active
Red LED	Error, Stop mode
Protection	IP65

### ModBUS RTU Technical Specifications

Interface	RS485
Protocol	Modbus RTU
Communication profile	Modbus RTU V1.1
Node number	1 - 247
Baud rate	9600 - 115200 bit/sec.

### BISS Technical Specifications

Communication	RS422
Protocol	BISS binary
Status LED	Optional
Green LED	Power on, Bus communicaton
Red LED	Sensor error

### ProfiBUS Technical Specifications

Interface	PROFIBUS-DP
Protocol	PROFIBUS-DP V0/V1/V2
Line Driver	Galvanic isolated
Node addressing	By switches or software
Green LED	Power on, PROFIBUS communication active
Red LED	Error, Stop mode
Protection	IP65

### EtherCAT Technical Specifications

Interface	EtherCAT Ethernet control automotion technology
Protocol	EtherCAT 100 Base-Tx, Fast Ethernet
Baud rate	Max. 100 Mbit/s
Green LED	Power on, EtherCAT communication active
Red LED	Error, Stop mode
Protection	IP65

### SSI Technical Specifications

Communication	RS422
Protocol	SSI binary, SSI gray
Status LED	Optional
Green LED	Power on, Bus communicaton
Red LED	Sensor error

# DMST

## Digital Non-Contact Magnetostrictive ve Position Sensor

- Measuring range 100 - 5000 mm •
- 15 bit resolution •
- CANopen, ProfiBUS, EtherCAT, Modbus, •
- SSI, BISS INTERFACE or CANbus output options



### CANopen / CANbus Technical Specifications

Interface	CAN
Protocol	CANopen, CANbus
Communication profile	CiA301, CiA406 V3.2
Node number	1 up to 127 (default Node ID: 88)
Green LED	Power on, Can communication active
Red LED	Error, Stop mode
Protection	IP65

### ModBUS RTU Technical Specifications

Interface	RS485
Protocol	Modbus RTU
Communication profile	Modbus RTU V1.1
Node number	1 - 247
Baud rate	9600 - 115200 bit/sec.

### BISS Technical Specifications

Communication	RS422
Protocol	BISS binary
Status LED	Optional
Green LED	Power on, Bus communicaton
Red LED	Sensor error

### ProfiBUS Technical Specifications

Interface	PROFIBUS-DP
Protocol	PROFIBUS-DP V0/V1/V2
Line Driver	Galvanic isolated
Node addressing	By switches or software
Green LED	Power on, PROFIBUS communication active
Red LED	Error, Stop mode
Protection	IP65

### EtherCAT Technical Specifications

Interface	EtherCAT Ethernet control automation technology
Protocol	EtherCAT 100 Base-Tx, Fast Ethernet
Baud rate	Max. 100 Mbit/s
Green LED	Power on, EtherCAT communication active
Red LED	Error, Stop mode
Protection	IP65

### SSI Technical Specifications

Communication	RS422
Protocol	SSI binary, SSI gray
Status LED	Optional
Green LED	Power on, Bus communicaton
Red LED	Sensor error

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